

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

Applicant: Rajiv SHAH, et al.

Title: METHOD FOR FORMULATING A GLUCOSE OXIDASE  
ENZYME WITH A DESIRED PROPERTY OR PROPERTIES AND  
A GLUCOSE OXIDASE ENZYME WITH THE DESIRED  
PROPERTY

Prior Appl. No.: 10/035,918

Prior Appl. Filing Date: 12/28/2001

Examiner: Not assigned

Art Unit: 1645

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 10/035,918, filed 12/28/2001. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to

antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the filing date of the application.

**RELEVANCE OF EACH DOCUMENT**

The relevance of the foreign-language document is explained in the parent application.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date: November 17, 2003

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By 

Ted R. Rittmaster  
Attorney for Applicant  
Registration No. 32,933

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Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Date Submitted: August 12, 2002 <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Prior Application Number	10/035,918
				Prior Filing Date	December 28, 2001
				First Named Inventor	Rajiv Shah
				Group Art Unit	1284
				Prior Examiner Name	Yong D. Pak
				Attorney Docket Number	047711-0325

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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		4,240,438		Updike et al.	12/23/1980	
		4,479,796		Kallok	10/30/1984	
		4,484,987		Gough	11/27/1984	
		4,568,335		Updike et al.	02/04/1986	
		4,628,928		Lowell	12/16/1986	
		4,650,547		Gough	03/17/1987	
		4,703,756		Gough et al.	11/03/1987	
		4,757,022		Shults et al.	07/12/1988	
		4,771,772		DeWitt	09/20/1988	
		4,890,620		Gough	01/02/1990	
		4,911,168		Davis	03/27/1990	
		4,994,167		Shults et al.	02/19/1991	
		5,094,951		Rosenberg	03/10/1992	
		5,266,688		Rosenberg	11/30/1993	
		5,328,460		Lord et al.	07/12/1994	
		5,497,772		Schulman et al.	03/12/1996	
		5,534,025		Moussy	07/09/1996	
		5,593,852		Heller et al.	01/14/1997	
		5,660,163		Schulman et al.	08/26/1997	
		5,667,983		Abel et al.	09/16/1997	
		5,696,314		McCaffrey et al.	12/09/1997	
		5,707,502		McCaffrey et al.	01/13/1998	
		5,711,868		Maley et al.	01/27/1998	
		5,728,281		Holmstrom et al.	03/17/1998	
		5,741,211		Renirie et al.	04/21/1998	
		5,741,319		Woloszko et al.	05/21/1998	
		5,770,028		Maley et al.	06/23/1998	
		5,773,270		D'Orazio et al.	06/30/1998	
		5,791,344		Schulman et al.	08/11/1998	
		5,804,048		Wong et al.	09/08/1998	
		5,914,245		Bylina et al.	06/22/1999	
		5,919,216		Houben et al.	07/06/1999	
		5,932,175		Knute et al.	08/03/1999	
		5,941,906		Barreras, Sr., et al.	08/24/1999	
		5,965,380		Heller et al.	10/12/1999	
		5,985,129		Gough et al.	11/16/1999	
		5,992,211		Skrtic	11/30/1999	
		6,001,067		Shults et al.	12/14/1999	
		6,001,586		Schellenberger	12/14/1999	

Examiner Signature	Date Considered
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				Group Art Unit	1284
				Prior Examiner Name	Yong D. Pak
				Attorney Docket Number	047711-0325
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U.S. PATENT DOCUMENTS					
	U.S. Patent Document				
	6,002,954		Van Antwerp et al.	12/14/1999	
	6,027,479		Alei et al.	02/22/2000	
	6,049,727		Crothall	04/11/2000	
	Des. 424,696		Ray et al.	05/09/2000	
	Des. 426,638		Ray et al.	06/13/2000	
	6,074,860		Robertson et al.	06/13/2000	
	6,093,167		Houben et al.	07/25/2000	
	6,103,033		Say et al.	08/15/2000	
	6,120,676		Heller et al.	09/19/2000	
	6,122,536		Sun et al.	09/19/2000	
	6,125,290		Miesel	09/26/2000	
	6,125,291		Miesel et al.	09/26/2000	
	6,134,459		Roberts et al.	10/18/2000	
	6,135,978		Houben et al.	10/24/2000	
	6,144,866		Miesel et al.	11/07/2000	
	6,159,240		Sparer et al.	12/12/2000	
	6,162,611		Heller et al.	12/19/2000	
	6,162,640		Wohlstadter	12/19/2000	
	6,163,723		Roberts et al.	12/19/2000	
	6,171,810 B1		Zhu	01/09/2001	
	6,174,673 B1		Short et al.	01/16/2001	
	6,175,752		Say et al.	01/16/2001	
	6,198,952		Miesel	03/06/2001	
	6,201,980		Darrow et al.	03/13/2001	
	6,204,029 B1		Withers et al.	03/20/2001	
	6,238,884		Short et al.	05/29/2001	
	6,248,080		Miesel et al.	06/19/2001	
	6,251,260		Heller et al.	06/26/2001	
	6,261,280		Houben et al.	07/17/2001	
	6,268,161		Han et al.	07/31/2001	
A1	2002/0127623		Minshull et al.	09/12/2002	
A1	5,795,774		Matsumoto et al.	06/18/1998	
A2	5,280,587		Matsumoto	08/28/2001	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		DE	39251400 A1		Kalisz et al.	07.02.91		

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		WO	99/51777		Lerner	14.10.99		
		WO	99/34212		Helling	08.07.99		
		WO	01/01851 A1		Van Antwerp et al.	11.01.2001		
		WO	01/88110 A1		Arnold et al.	22.11.2001		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
		Affholter, Joseph, et al., ENGINEERING A REVOLUTION, chembytes e-zine, April 1999	
	A3	PCT International Search Report as issued in International Application No. PCT/US02/30849, Mailing Date June 9, 2003	
	A4	WITT, S. et al. Conserved arginine-516 of penicillium amagasakiense glucose oxidase is essential for the efficient binding of B-D glucose. Biochem. J. 2000, pages 553-559, see entire document.	
	A5	ELIAS, M.D. et al. Functions of amino acid residues in the active sit of Escherichia coil pyrroloquinoline quinine containing quinoprotein glucose dehydrogenase. The Journal of Biological Chemistry. March 2000, Vol. 275, No. 10, pages 7321-7326, see entire document.	

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